What is claimed is:

1.   A method of selecting an abstraction level to use when generating parser output,

comprising a step of requesting generation of parser output, by a parser that parses an input, such

that the generated output adheres to a different syntax level than a syntax level used when

validating the input.

2.   The method according to Claim 1, wherein the validation is performed by the parser.

3.   The method according to Claim 1, wherein the input is a structured document.

4.   The method according to Claim 4, wherein the structured document is encoded in

Extensible Markup Language ("XML").

5.   The method according to Claim 1, wherein the generated output comprises one or more

object representations generated from the input.

6.   The method according to Claim 1, wherein the parser is a validating parser that also

performs the validation of input.

7.   The method according to Claim 1, wherein the requesting step further comprises the step

of specifying a schema name to which the generated output must adhere.

1   8.   The method according to Claim 1, wherein the requesting step further comprises the step

2   of specifying a schema name to be used by the parser when generating the output.

1   9.   The method according to Claim 8, wherein the schema name is specified as a feature of

2   the parser.

1   10.   The method according to Claim 8, wherein the schema name is specified by an application

2   program for which an instance of the parser is created.

1   11.   The method according to Claim 1, wherein the syntax level used for validating is specified

2   in the input.

1   12.   The method according to Claim 11, wherein the specification in the input uses a schema

2   location construct in the input.

1   13.   A method of casting objects, further comprising a step of validating an input according to

2   a first syntax level while generating output, from the input, according to a second syntax level.

1   14.   The method according to Claim 13, wherein the second syntax level is a less-restrictive

2   version of the first syntax level.

1   15.   The method according to Claim 13, wherein the first syntax level is a more-restrictive

2 definition of the second syntax level.

1 16. The method according to Claim 13, wherein the first syntax level is an extension of the
2 second syntax level.

1 17. The method according to Claim 13, wherein the first syntax level represents at least one
2 extension of the second syntax level.

1 18. The method according to Claim 13, wherein the first syntax level and the second syntax
2 level are defined using schemas.

1 19. The method according to Claim 18, wherein the schema that defines the first syntax level
2 is an extension of the schema that defines the second syntax level.

1 20. The method according to Claim 13, wherein the first syntax level represents at least one
2 extension of the second syntax level.

1 21. The method according to Claim 13, wherein the generated output adheres to the second
2 syntax level.

1 22. The method according to Claim 13, wherein the input adheres to an extended schema that
2 defines the first syntax level.

1   23.   The method according to Claim 22, wherein the generated output adheres to a base

2   schema that is extended by the extended schema.

1   24.   A system for applying abstraction to object markup definitions, further comprising:

2   a validating parser;

3   first means for using the validating parser to validate an input document expressed as an

4   object markup definition, wherein the validation is performed according to a syntax level which

5   allows the object markup definition to be successfully validated; and

6   second means for using the validating parser to apply abstraction to the object markup

7   definition when generating an output object, responsive to the first means, wherein the application

8   of abstraction generates the output object according to a different syntax level which would not

9   allow the object markup definition to be successfully validated.

1   25.   The system according to Claim 24, wherein the different syntax level is requested by an

2   application program that will consume the generated output object.

1   26.   A computer program product for improved parsing of input, the computer program

2   product embodied on one or more computer-usable media and comprising:

3   computer-readable program code means for validating an input according to a first

4   schema, wherein the first schema defines a first level that enables content in the input to be

5   successfully validated; and

6   computer-readable program code means for generating one or more output objects

7   according to a second schema, upon parsing the successfully-validated content in the input,

8   wherein the second schema defines a second syntax level that does not enable the content in the

9   input to be successfully validated.

1   27.   The computer program product according to Claim 26, wherein the first syntax level is a

2   more-restrictive version of the second syntax level.

1   28.   The computer program product according to Claim 26, wherein the first schema is defined

2   as an extension of the second schema.

1   29.   The computer program product according to Claim 26, wherein the first schema is defined

2   as an extension of some intermediate schema that extends the second schema.

1   30.   The computer program product according to Claim 26, wherein the second schema is a

2   base schema upon which one or more extensions are based, and wherein the second schema is one

3   of the extensions and is based either directly on the base schema or on an intermediate schema

4   that extends the base schema.

1   31.   A method of doing business by providing improved validation and parsing for clients,

2   comprising steps of:

3   providing a validating parser that enables a client to dynamically select an abstraction level

4   for use when generating output from the validating parser;

5   obtaining an input document to be validated and parsed for the client;

6   validating the input document with the provided validating parser, wherein the validation

7   is performed according to a first syntax level associated with syntax specified in the input

8   document;

9   generating output from the input document with the provided validating parser, wherein

10   the generated output has syntax that conforms to the abstraction level that has been dynamically

11   selected by the client and wherein the abstraction level is a refinement of the first syntax level; and

12   charging a fee for at least one of the providing, obtaining, validating, and generating steps.